

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	0	("pHwithfibrinwithglue").PN.	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	OFF	2005/04/21 17:09
L2	14	ph with fibrin with glue	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:16
L3	2	acidic near3 fibrin near3 glue	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:17
L4	364	(ph or acidic) with fibronectin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:18
L5	273	(ph) with fibronectin	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:32
L6	0	eptfe with (acid or acidic) with slurry	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:32
L7	0	eptfe same (acid or acidic) with slurry	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:33
L8	2	eptfe and (acid or acidic) with slurry	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:34
L9	0	(expanded near3 PTFE or expanded near3 polytetrafluoroethys) with (acid or acidic) with slurry	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:35

L10	0	(expanded near3 PTFE or expanded near3 polytetrafluoroethy\$) same (acid or acidic) with slurry	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:35
L11	10	(expanded near3 PTFE or expanded near3 polytetrafluoroethy\$) and (acid or acidic) with slurry	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:37
L12	73	(expanded near3 PTFE or expanded near3 polytetrafluoroethy\$) with (acid or acidic)	US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT	OR	ON	2005/04/21 17:37

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	Document ID	Kind Code	Source	Term-Pat	Pages	Imag-
1	GB 2074093 A		DERWEN	19811028		
2	DE 3623893 A	A1, C2	DERWEN	19870129	6	DE 3
3	EP 295777 A	A1, B1	DERWEN	19881221	6	EP 2
4	US 4875908 A		USPAT	19891024	4	US 4
5	US 4902308 A		USPAT	19900220	7	US 4
6	US 4954238 A		USPAT	19900904	7	US 4
7	US 5019096 A		USPAT	19910528	23	US 5
8	US 5028597 A		USPAT	19910702	7	US 5
9	US 5082472 A		USPAT	19920121	14	US 5
10	US 5547551 A		USPAT	19960820	16	US 5
11	US 5616338 A		USPAT	19970401	21	US 5
12	US 5681624 A		USPAT	19971028	9	US 5
13	US 5874165 A		USPAT	19990223	25	US 5
14	US 5897955 A		USPAT	19990427	24	US 5
15	US 5900292 A		USPAT	19990504	8	US 5
16	US 5902745 A		USPAT	19990511	17	US 5
17	US 5914182 A		USPAT	19990622	25	US 5
18	US 6019788 A		USPAT	20000201	31	US 6
19	US 6042605 A		USPAT	20000328	32	US 6
20	US 6059943 A		USPAT	20000509	15	US 6
21	US 6199979 B1		USPAT	20010313	14	US 6
22	US 6254978 B1		USPAT	20010703	12	US 6
23	US RE37307 E		USPAT	20010807	18	US R
24	US 6287717 B1		USPAT	20010911	32	US 6
25	US 6300000 B1		USPAT	20011009	82	US 6
26	US 20010033960 A1		US-PGP	20011025	83	US 2
27	US 20010044413 A1		US-PGP	20011122		
28	US 20010049550 A1		US-PGP	20011206		
29	US 20020002397 A1		US-PGP	20020103		
30	US 20020011684 A1		US-PGP	20020131		
31	US 20020022588 A1		US-PGP	20020221		
32	US 20020022123 A1		US-PGP	20020221		
33	US 20020035394 A1		US-PGP	20020321		
34	US 6361637 B1		USPAT	20020326		
35	US 20020055697 A1		US-PGP	20020509		
36	US RE37701 E		USPAT	20020514		
37	US 6395383 B1		USPAT	20020528		
38	US 6416776 B1		USPAT	20020709		
39	US 20020095218 A1		US-PGP	20020718		
40	US 20020142459 A1		US-PGP	20021003		
41	US 20020142458 A1		US-PGP	20021003		
42	US 20020141979 A1		US-PGP	20021003		
43	US 20020155295 A1		US-PGP	20021024		

US-PAT-NO: 5681624

DOCUMENT-IDENTIFIER: US 5681624 A

TITLE: Liquid crystal polymer film and a method for manufacturing the same

----- KWIC -----

Detailed Description Text - DEXT (9):

A concentrated sulfuric acid solution containing 15% poly(p-phenylene terephthalamide) (PPTA) was cast on the surface of the porous expanded polytetrafluoroethylene membrane and allowed to impregnate into the membrane. Casting equipment having a static mixer-stirrer at its die inlet was used. While still on the casting belt, the impregnated expanded polytetrafluoroethylene membrane was immersed in an aqueous solution of sulfuric acid (25%) to coagulate the PPTA. The impregnated membrane was then removed from the belt and rinsed in water. These steps were repeated four times until the pores of the porous expanded polytetrafluoroethylene membrane, to depth of about 55% of the thickness of the membrane, were filled with PPTA.

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4	US 4875908 A		USPAT	19891024	4	US 4
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6	US 4954238 A		USPAT	19900904	7	US 4
7	US 5019096 A		USPAT	19910528	23	US 5
8	US 5028597 A		USPAT	19910702	7	US 5
9	US 5082472 A		USPAT	19920121	14	US 5
10	US 5547551 A		USPAT	19960820	16	US 5
11	US 5616338 A		USPAT	19970401	21	US 5
12	US 5681624 A		USPAT	19971028	8	US 5
13	US 5874165 A		USPAT	19990223	25	US 5
14	US 5897955 A		USPAT	19990427	24	US 5
15	US 5900292 A		USPAT	19990504	8	US 5
16	US 5902745 A		USPAT	19990511	17	US 5
17	US 5914182 A		USPAT	19990622	25	US 5
18	US 6019788 A		USPAT	20000201	31	US 6
19	US 6042605 A		USPAT	20000328	32	US 6
20	US 6059943 A		USPAT	20000509	15	US 6
21	US 6199979 B1		USPAT	20010313	14	US 6
22	US 6254978 B1		USPAT	20010703	12	US 6
23	US RE37307 E		USPAT	20010807	18	US R
24	US 6287717 B1		USPAT	20010911	32	US 6
25	US 6300000 B1		USPAT	20011009	82	US 6
26	US 20010033960 A1		US-PGP	20011025	83	US 2
27	US 20010044413 A1		US-PGP	20011122		
28	US 20010049550 A1		US-PGP	20011206		
29	US 20020002397 A1		US-PGP	20020103		
30	US 20020011684 A1		US-PGP	20020131		
31	US 20020022588 A1		US-PGP	20020221		
32	US 20020022123 A1		US-PGP	20020221		
33	US 20020035394 A1		US-PGP	20020321		
34	US 6361637 B1		USPAT	20020326		
35	US 20020055697 A1		US-PGP	20020509		
36	US RE37701 E		USPAT	20020514		
37	US 6395383 B1		USPAT	20020528		
38	US 6416776 B1		USPAT	20020709		
39	US 20020095218 A1		US-PGP	20020718		
40	US 20020142459 A1		US-PGP	20021003		
41	US 20020142458 A1		US-PGP	20021003		
42	US 20020141979 A1		US-PGP	20021003		
43	US 20020155295 A1		US-PGP	20021024		

US-PAT-NO: 4875908

DOCUMENT-IDENTIFIER: US 4875908 A

TITLE: Process for selectively separating gaseous mixtures containing water vapor

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Detailed Description Text - DETX (19):

The same porous, expanded polytetrafluoroethylene membrane used in Example 1 was impregnated with a 9% ethanol solution of the fluororesin copolymer containing sulfonic acid groups used in Example 1. The impregnated membrane was allowed to stand for 24 hours at 40.degree. C., and was then further dried for 180 minutes at 120.degree. C. to produce a membrane selectively permeable to water vapor.

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1	GB 2074093 A		DERWEN	19811028		
2	DE 3623893 A	A1, C2	DERWEN	19870129	6	DE 3
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5	US 4902308 A		USPAT	19900220	7	US 4
6	US 4954238 A		USPAT	19900904	7	US 4
7	US 5019096 A		USPAT	19910528	23	US 5
8	US 5028597 A		USPAT	19910702	7	US 5
9	US 5082472 A		USPAT	19920121	14	US 5
10	US 5547551 A		USPAT	19960820	16	US 5
11	US 5616338 A		USPAT	19970401	21	US 5
12	US 5681624 A		USPAT	19971028	8	US 5
13	US 5874165 A		USPAT	19990223	25	US 5
14	US 5897955 A		USPAT	19990427	24	US 5
15	US 5900292 A		USPAT	19990504	8	US 5
16	US 5902745 A		USPAT	19990511	17	US 5
17	US 5914182 A		USPAT	19990622	25	US 5
18	US 6019788 A		USPAT	20000201	31	US 6
19	US 6042605 A		USPAT	20000328	32	US 6
20	US 6059943 A		USPAT	20000509	15	US 6
21	US 6199979 B1		USPAT	20010313	14	US 6
22	US 6254978 B1		USPAT	20010703	12	US 6
23	US RE37307 E		USPAT	20010807	18	US R
24	US 6287717 B1		USPAT	20010911	32	US 6
25	US 6300000 B1		USPAT	20011009	82	US 6
26	US 20010033960 A1		US-PGP	20011025	83	US 2
27	US 20010044413 A1		US-PGP	20011122		
28	US 20010049550 A1		US-PGP	20011206		
29	US 20020002397 A1		US-PGP	20020103		
30	US 20020011684 A1		US-PGP	20020131		
31	US 20020022588 A1		US-PGP	20020221		
32	US 20020022123 A1		US-PGP	20020221		
33	US 20020035394 A1		US-PGP	20020321		
34	US 6361637 B1		USPAT	20020326		
35	US 20020055697 A1		US-PGP	20020509		
36	US RE37701 E		USPAT	20020514		
37	US 6395383 B1		USPAT	20020528		
38	US 6416776 B1		USPAT	20020709		
39	US 20020095218 A1		US-PGP	20020718		
40	US 20020142459 A1		US-PGP	20021003		
41	US 20020142458 A1		US-PGP	20021003		
42	US 20020141979 A1		US-PGP	20021003		
43	US 20020155295 A1		US-PGP	20021024		

US-PAT-NO: 4902308

DOCUMENT-IDENTIFIER: US 4902308 A

TITLE: Composite membrane

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## Detailed Description Text - DETX (5):

Specifically, an expanded PTFE membrane whose microstructure is comprised of nodes interconnected by fibrils (FIGS. 1 and 2) is used as the support for the active metal ion exchange polymer coating. The ~~expanded PTFE~~ membrane is impregnated with a perfluoro-cation exchange polymer by fully wetting the structure with a dilute solution of this polymer, for example, sulfonic ~~acid~~ or carboxylic ~~acid~~ polymer, in alcohol or other suitable solvent. With the membrane restrained to prevent dimensional changes, the solvent is evaporated in an oven at 80.degree. C. to 120.degree. C. leaving a porous, chemically stable ion to exchange substrate with very high active surface area (FIGS. 3 and 4).

## Detailed Description Text - DETX (10):

An expanded PTFE membrane substrate having the following specific physical characteristics was employed: air flow was between 11.6 and 13.0 seconds as measured by Gurley densometer ASTM D726-58; thickness was between 0.0040 and 0.0045 inches; apparent density was between 0.20 and 0.25 g/cc; and methanol bubble point measured according to ASTM F316-80 was between 11.1 and 12.0 psi. A small sample of this expanded PTFE membrane was restrained on a frame. Approximately 10 ml of a 2.0% solution of 920 equivalent weight perfluorosulfonic acid polymer in ethyl alcohol (as disclosed in DuPont U.K. No. 1,286,859) was added to the expanded PTFE substrate to fully wet the membrane. Excess polymer solution was decanted and the wet membrane was placed in 100.degree. C. to 105.degree. C. oven for 5 minutes until fully dry. This perfluorosulfonic ~~acid~~ polymer/~~expanded PTFE~~ matrix had 12.5% perfluorosulfonic ~~acid~~ polymer by weight, air flow ranged from 9 to 14 seconds measured according to ASTM D726-58, thickness was between 0.0022 and 0.0024 inches, and the sulfonic ~~acid~~ loading was 0.32 microequivalents per square centimeter.

## Detailed Description Text - DETX (11):

A 2.5 inch square section of perfluorosulfonic ~~acid~~ polymer/~~expanded PTFE~~ membrane was placed in a polypropylene frame and wet with a solution of 15% isopropyl alcohol in deionized water. Excess alcohol solution was decanted and approximately 10 ml of a 1.0M solution of silver nitrate was added. The membrane was allowed to silver exchange at room temperature overnight. The silver ion exchanged membrane was then rinsed with deionized water and dried at room temperature under vacuum. The dried membrane was cut to give two 1.times.2 inch samples which were placed into gas sensors.

## Detailed Description Text - DETX (14):

The control had between 2.5 and 6.0 microequivalents/cm.sup.2 theoretical active sites whereas the ~~expanded PTFE~~ perfluorosulfonic acid polymer/silver ion membrane from the Example had only 0.32 microequivalents/cm.sup.2 theoretical active sites. In spite of this, the membrane of the Example showed between 31% and 110% increase in lifetime, with less than one-eighth of the theoretical equivalents of the control.